| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/782,178 | 02/12/2001 | Alexander Gorelik | 019024-001710US | 2114 |

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| EXAMINER |
|---|
| LIANG, GWEN |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2172 | 11 |

DATE MAILED: 11/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) ☒ Responsive to communication(s) filed on _04 August 2003 and 25 August 2003_.

2a) ☐ This action is **FINAL**.     2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) ☒ Claim(s) _1-6_ is/are pending in the application.

     4a) Of the above claim(s) _6_ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-5_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a) ☐ All b) ☐ Some * c) ☐ None of:

         1. ☐ Certified copies of the priority documents have been received.

         2. ☐ Certified copies of the priority documents have been received in Application No. _____.

         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

     a) ☐ The translation of the foreign language provisional application has been received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _6,7_.

4) ☐ Interview Summary (PTO-413) Paper No(s). _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other:

## DETAILED ACTION

### *Election/Restrictions*

1.      Applicant's election without traverse of Group I including claims 1-5 in Paper No.
10 is acknowledged.

2.      Claim 6 of Group II is withdrawn from further consideration as being drawn to a
nonelected invention.

### *Claim Rejections - 35 USC § 101*

3.      35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

Claim 1 is rejected under 35 U.S.C. 101 because the claimed invention is
directed to non-statutory subject matter.  "A computing system" is not tangibly embodied
in a computer-readable medium, and hence non-statutory.

### *Claim Rejections - 35 USC § 112*

4.      The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

5.      Regarding claim 1, the adjective "substantive" renders the claim(s) indefinite
because the use of the adjective "substantive" renders the "copies" indefinite, therefore
rendering the scope of the claim(s) unascertainable.

## *Claim Rejections - 35 USC § 103*

6.      The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

7.      Claims 1, 3, 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Carlson (U.S. Patent No. 6,377,959).

With respect to claim 1, Carlson discloses a system comprising:

a first database; a second database, wherein the first database and second

database a substantive copies of each other outside of an update period; (See for

example: Abstract, "A transaction processing system that continues to process incoming

transactions during the failure and recovery of either of two duplicate databases."; col. 4

lines 31-33, "System 10 maintains a database in each of the two library managers 12

and 14 with identical entries to provide redundancy for purposes of fault tolerance."; col.

7 lines 5-8, "Because the dual database system of this invention provides two

databases, either may be designated as "active", but not both.  For instance, the two

exemplary library managers (FIG. 1) must negotiate for active status at startup ...");

a database indicator that indicates one of the first and second databases as a

live database and the other one of the first and second databases as a load database

(See for example: Abstract, 'One of the two duplicate databases is assigned "active"

status and the other is maintained with "redundant" status.', wherein the database with

the "active" status is analogous to the live database and the database with the

"redundant" status is analogous to the load database.);

a query router for routing queries to the live database (See for example: Abstract,

"All incoming queries are sent only to the active database"; col. 6 line 65 – col. 7 line 1,

"Because records are read only from the "active" database in the dual database system

of this invention, step 106 reads the record from DB1, which is the "active" one of the

two."); and

a router switcher for switching the database indicator such that the live database

becomes the load database and the load database becomes the live database (See for

example: col. 7 lines 14-17, "If the "active" database fails, the "redundant" or "backup"

switches to "active" status and continues operating during the repair and recovery

process.", it is inherent that after one database is switched to "active" status, the other

one is then switched to "redundant" status, which is analogous to "load" status.).

Carlson does not explicitly teach "an application", from which a query router

routes queries to the live database. However, the teaching of this feature is obvious

because in order for a user to query a database, an application needs to exist for a user

to input database queries; therefore the queries are actually routed to a database

through the application used for accepting user queries.

It would have been obvious to one having ordinary skill in the art at the time the

invention was made to use an application, from which queries are routed to a live

database as taught in Carlson. The application is provided for a database user to enter

database queries. One of ordinary skill in the art would be motivated to make the

aforementioned combination with reasonable expectation of success.

Claim 3 is rejected for the reasons set forth hereinabove for claim 1 and

furthermore Carlson teaches a system comprising an update router for routing updates

from an updater to the load database (See for example Abstract, "When the failed

database is repaired and restarted, all records are flushed therefrom and the failed

database is reconstructed using interleaved copy and update operations in a single

pass through the active database.").

Claim 5 is rejected for the reasons set forth hereinabove for claim 1 and

furthermore Carlson teaches a system comprising an update cache that stores updates

from the updater including logic to initiate update of the live database with the stored

updates when the live database becomes the load database (See for example: col. 3

lines 19-24, wherein transaction log is analogous to an update cache.).

8.      Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Carlson (U.S. Patent No. 6,377,959), further in view of Dettinger et al., "Dettinger" (U.S.

Patent No. 6199069).

Claim 2 is rejected for the reasons set forth hereinabove for claim 1. However

Carlson does not explicitly teach a system wherein the queries from an application to

the live database are in the form of SQL queries.

Dettinger discloses a system wherein the queries routed to the live database are

in the form of SQL queries (See for example col. 9 lines 31-33).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to send queries from an application to the live database as taught in Carlson in the form of SQL queries as disclosed in Dettinger, since SQL is a well known standard interactive programming language commonly used for getting information from and updating databases (col. 9 lines 31-33). One of ordinary skill in the art would be motivated to make the aforementioned combination with reasonable expectation of success.

Claim 4 is rejected for the reasons set forth hereinabove for claim 3. However Carlson does not explicitly teach a system wherein the updates from an updater to the load database are in the form of SQL statements.

.Dettinger discloses a system wherein the updates from an updater to the load database are in the form of SQL statements (See for example col. 9 lines 31-33).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to send updates from an updater to the load database as taught in Carlson in the form of SQL statements as disclosed in Dettinger, since SQL is a well known standard interactive programming language commonly used for getting information from and updating databases (col. 9 lines 31-33). One of ordinary skill in the art would be motivated to make the aforementioned combination with reasonable expectation of success.
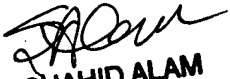
## *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GWEN LIANG whose telephone number is 703-305-3985. The examiner can normally be reached on 9:00 A.M. - 5:30 P.M. Monday and Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, KIM VU can be reached on (703) 305-4393. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

G.L.

7 November 2003

SHAHID ALAM
PRIMARY EXAMINER